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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,247	11/25/2003	Lutz Gerhard	MSFT-2782/302762.01	6041

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EXAMINER

EHICHIOYA, FRED I

ART UNIT	PAPER NUMBER
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2162

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/722,247

Applicant(s)

GERHARD, LUTZ

Examiner

Fred I. Ehichioya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4, 6 - 11, 13, 15 - 24, 26 - 31, and 33 - 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 - 4, 6 - 11, 13, 15 - 24, 26 - 31, and 33 - 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 –4, 6 – 11, 13, 15 – 24, 26 – 31, and 33 - 34 are pending in this Office Action.
2. Claims 5, 12, 14, 25 and 32 are canceled.

Claim Objections

3. Applicant's cancellation of claims 12 and 25 overcome the claims objection under 37 CFR 1.75(c). Therefore, claims objections of last Office Action hereby withdrawn.

Response to Arguments

4. Applicant argues:

APA does not teach or suggest either (1) a master file that is stored at a client; and (2) a replica file that is stored at a server (Remarks: page 7, paragraph 6).

Examiner respectfully disagrees with the applicant. Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains “a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights”. As shown in Fig. 1 and column 4, lines 1 – 2, public folders A1, B1, A2, B2 are the replicas stored on the servers.

Specification Objections

5. The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by reference to the drawing, designating the part or parts therein to which the term applies MPEP 608.01(o) [R-3].

The specification is objected because claims 7, 18 and 28 recite "member of a group" and the specification fails to provide antecedent basis for the term "member of a group".

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 –4, 6 – 11, 13, 15 – 24, 26 – 31, and 33 - 34 are rejected under 35 U.S.C. 101 because:

Regarding claims 1, 13 and 26, these claims are directed to replicating a master file. The claimed subject matter lacks a practical application of judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful result. For an invention to be "useful" it must satisfy the utility requirement of section 101. The claimed invention as a whole must be useful and accomplish a practical application. Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the

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claimed invention is useful. Such a statement will usually explain the purpose of the invention or how the invention may be used (e.g., a compound is believed to be useful in the treatment of a particular disorder). Regardless of the form of statement of utility, it must enable one ordinarily skilled in the art to understand why the applicant believes the claimed invention is useful. MPEP 2106[R-5](II)(A).

More specifically, the claimed subject matter provides for **“replicating a change to the master file from the master file at the client computing device to a replica at a connected server”**. This produced result remains in the abstract, does not satisfy the utility requirement of section 101 and, thus, fails to achieve the required status of having real world value.

The claimed invention does not accomplish a “useful result” as forth in MPEP 2106 (II) (A).

Regarding claims 2 – 4, 6 – 11, 15 – 24, 27 – 31 and 33 - 34, and in view of MPEP 2106 (II) (A), are not statutory because they recite computing steps without producing any concrete and useful result and/or being limited to a practical application within the technological arts. The claims are merely descriptive and lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. The claims do not accomplish a “practical application” as forth in MPEP 2106 (II) (A); therefore non-statutory.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 3, 9 – 11, 13, 22 – 24, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent No. 5,819,272 issued to Max L. Benson (hereinafter “Benson”).

Regarding claims 1, Benson discloses a method for replicating a master file, the method comprising:

providing at a client computing device an interface (column 3, lines 56 – 60: Benson discloses “client software” as “interface”) that enables a user to select the master file (column 4, line 10: Benson discloses “master copy” as “master file”) for replication (column 7, lines 19 – 20); and

replicating a change (column 4, lines 43 – 52) to a master file (column 4, line 10: Benson discloses “master copy” as “master file”) from the master file at the client computing device to a replica at a connected server (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains “a master copy of the read/unread data record 28 is stored in the user’s mailbox for each public folder to which the user has

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access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server).

Regarding claim 2, Benson discloses replicating (column 4, lines 43 – 52) at the client computing device from the connected server a change to a replica of the master file (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains "a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server).

Regarding claim 3, Benson discloses replicating (column 4, lines 43 – 52) at the client computing device the change to the replica (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains "a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server) according to a conflict resolution scheme (column 2, lines 50 - 52).

Regarding claim 9, Benson discloses providing at a client computing device an interface (column 3, lines 56 – 60: Benson discloses “client software” as “interface”) that enables a user to select a portion of the master file (column 4, line 10: Benson discloses “master copy” as “master file”) for replication (column 7, lines 19 – 20).

Regarding claim 10, Benson discloses providing at a client computing device an interface (column 3, lines 56 – 60: Benson discloses “client software” as “interface”) that enables a user to select a security option (column 4, lines 7 – 10) for replication (column 7, lines 19 – 20) of the master file (column 4, line 10: Benson discloses “master copy” as “master file”).

Regarding claim 11, Benson discloses providing at a client computing device an interface (column 3, lines 56 – 60: Benson discloses “client software” as “interface”) that enables a user to select a security option (column 4, lines 7 – 12) for replication (column 7, lines 19 – 20) of selected a portion of the master file (column 4, line 10: Benson discloses “master copy” as “master file”).

Regarding claim 13, Benson discloses a method for replicating a master file, the method comprising:

replicating a change to master file from the master file at a client computing device to a replica at a connected server replicating a change (column 4, lines 43 – 52) to a master file (column 4, line 10: Benson discloses “master copy” as “master file”) from the master file at the client computing device to a replica at a connected server (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains “a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights”. As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server), the client computing device providing an interface (column 3, lines 56 – 60: Benson discloses “client software” as “interface”) enabling a user to select the master file (column 4, line 10: Benson discloses “master copy” as “master file”) for replication (column 7, lines 19 – 20); and

replicating a change to the replica from the replica at the connected server to the master at the client computing device (column 3, lines 11 – 16: Benson discloses that “changes made to the replica copy to reflect records read by the user are written back to the copy stored on the first server”; in this case first server is the client since changes in the replica are written back to reflect records read by the user. As explained above in response to argument, Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains “a master copy of the read/unread data record 28 is stored in the user's

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mailbox for each public folder to which the user has access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server).

Regarding claim 22, Benson discloses providing a security option (column 4, lines 7 - 8) for the master file (column 4, line 10: Benson discloses "master copy" as "master file") enabling the change to the master file to be replicated (column 7, lines 19 - 20).

Regarding claim 23, Benson discloses replicating (column 7, lines 19 - 20) a change to a portion of the master (column 4, line 10: Benson discloses "master copy" as "master file") file selected for replication (column 4, lines 57 - 58).

Regarding claim 24, Benson discloses providing a security option (column 4, lines 7 - 8) for the portion of the master file (column 4, line 10: Benson discloses "master copy" as "master file") enabling the change to the portion of the master file to be replicated (column 4, lines 57 - 58).

Regarding claim 26, APA discloses a system for replicating a master file, the system comprising:

a client computing device comprising a master file (column 4, line 10: Benson discloses "master copy" as "master file"), the client computing device providing a user interface (column 3, lines 56 – 60: Benson discloses "client software" as "interface") that enables a user to select the master file for replication (column 7, lines 19 – 20), the client computing device replicating (column 4, lines 43 – 52) a change to the master file from the master file at the client computing device to a replica at a connected server (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains "a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server); and

the connected computing device replicating (column 4, lines 43 – 52) from the client computing device to a replica the change to the master file (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains "a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights". As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server).

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Regarding claim 29, Benson discloses the client computing device replicates (column 4, lines 43 – 52) the change to the master file in response to a request from the connected server (Benson discloses that master copy is stored on the client and replica is stored on the server as shown in column 3, line 64 – column 4, line 2. Benson further explains “a master copy of the read/unread data record 28 is stored in the user's mailbox for each public folder to which the user has access rights”. As shown in Fig. 1 and column 4, lines 1 – 2, public folders A2, B2 are the replicas stored on the server).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4, 6, 8, 15 – 17, 19 – 21, 27, 30, 31, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson in view of Applicant Admitted Prior Art (hereinafter “APA”).

Regarding claim 4, Benson discloses the claimed subject matter as discussed in claims 1 - 3. Benson does not explicitly disclose, “replicating if the change to the replica does not conflict with the master file”.

APA discloses replicating at the client computing device the change to the replica if the change to the replica does not conflict with the master file (spec page 7, paragraph 28: "Changes may be made locally to replica 225 at client 220 and, if such local changes do not conflict with changes to master 215, such local changes may be replicated back to master 215").

It would have been obvious to one of ordinary skills in data processing art at the time of present invention to combine the cited references because APA's teaching of "replicating if the change to the replica does not conflict with the master file" would have allowed Benson to replicate changes to replica with going through conflict resolutions. This process would allow Benson to replicate changes without incurring addition expenses since conflict resolution is by-passed.

Regarding claim 6, APA discloses replicating the change to the master file in response to an event occurring at the client computing device (spec page 7, paragraph 32: "at another connected client, the third row of a replica may be deleted. This change may be then replicated back to master 215, resulting in the third row being deleted from master 215 at step 314b").

Regarding claim 8, APA discloses replicating the change to the master file in response to a request from the connected computing device (spec page 7, paragraph 32: "at another connected client, the third row of a replica may be deleted. This change may be then replicated back to master 215, resulting in the third row being deleted from master 215 at step 314b").

Regarding claim 15, APA discloses replicating to the client computing device the change to the replica according to a conflict resolution scheme (spec page 7, paragraph 29: "A local change to replica 225 at client 220 may be related a change to another replica at another connected client. For example, a particular row may be both deleted at client 220 and modified at another client. When such related changes are replicated back to server 210 from client 220 and from the other connected client, such related changes may result in a conflict. Such a conflict may be resolved according to one of several conventional conflict resolution schemes, which are discussed in detail below with reference to FIG. 3").

Regarding claim 16, APA discloses replicating to the client computing device the change to the replica if the change to the replica does not conflict with the master file (spec page 7, paragraph 28: "Changes may be made locally to replica 225 at client 220 and, if such local changes do not conflict with changes to master 215, such local changes may be replicated back to master 215").

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Regarding claim 17, APA discloses replicating the change to the master file in response to an event occurring at the client computing device (spec page 7, paragraph 32: "at another connected client, the third row of a replica may be deleted. This change may be then replicated back to master 215, resulting in the third row being deleted from master 215 at step 314b").

Regarding claim 19, APA discloses requesting replication of the change to the master file in response to a command from another client computing device spec page 7, paragraph 32: "at another connected client, the third row of a replica may be deleted. This change may be then replicated back to master 215, resulting in the third row being deleted from master 215 at step 314b").

Regarding claim 20, APA discloses replicating to another client computing device the change to the master file (spec page 7, paragraph 32: "Alternatively, as set forth above, such changes may be replicated to server 210 from another connected client").

Regarding claim 21, APA discloses replicating from another client computing device the change to the replica (Spec page 7, paragraph 29: "A local change to replica 225 at client 220 may be related a change to another replica at another connected client").

Regarding claim 27, APA discloses replicating the change to the master file in response to an event occurring at the client computing device (spec page 7, paragraph 32: "at another connected client, the third row of a replica may be deleted. This change may be then replicated back to master 215, resulting in the third row being deleted from master 215 at step 314b").

Regarding claim 30, APA discloses the client computing device replicates to the master file a change to the replica (spec page 7, paragraph 28: "Changes may be made locally to replica 225 at client 220 and, if such local changes do not conflict with changes to master 215, such local changes may be replicated back to master 215").

Regarding claim 31, APA discloses the client computing device replicates to the master file a change to the replica according to a conflict resolution scheme (spec page 8, paragraph 34: "server 210 replicates replica 225 to master 215 according to a conflict resolution scheme").

Regarding claim 33, APA discloses the server replicates to a replication client the change to the master file (spec page 7, paragraph 30: "At step 310, server 210 replicates master 215 to client 220").

Regarding claim 34, APA discloses the server replicates from a replication client the change to the replica (spec page 7, paragraph 32: "Alternatively, as set forth above, such changes may be replicated to server 210 from another connected client. For example, at another connected client, the third row of a replica may be deleted").

11. Claims 7, 18 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson in view of APA and further in view of Neeman et al. "Neeman" (USPN 5,588,147).

Regarding claims 7, 18 and 28, Benson and APA disclose the claimed subject matter as discussed in claims 6, 17 and 27 respectively. Benson or APA does not explicitly disclose expiration of a selected time interval as claimed.

However, Neeman discloses replicating the change to the master file in response to one of an expiration of a selected time interval, closing the master file at the client device, saving the master file at the client device, and shutting down the client device (column 6, lines 37 – 44: Examiner interprets "the passage of a certain amount of time" as "expiration of a selected time interval").

It would have been obvious to one of ordinary skills in the data processing art at the time of the present invention to combine the cited references because Neeman's teaching of "replicating the change to the master file in response to an expiration of a selected time interval" would allow APA to enhance system reliability, e.g., no one client or server (which may fail) exclusively possesses access to required data. The

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motivation is that having replicated data in clients/servers in the distributed system allow update data to be available at all time even if one client/server fails.

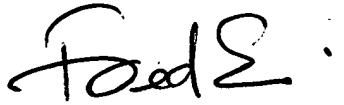
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred I. Ehichioya
Patent Examiner
Art Unit 2162



February 2, 2007